



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/036,175 | 12/26/2001 | William J. Drasler | | 6071 |

7590

04/17/2003

William J. Drasler
4100 Dynasty Drive
Minnetonka, MN 55345

EXAMINER

THALER, MICHAEL H

ART UNIT

PAPER NUMBER

3731

DATE MAILED: 04/17/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
10/036,175

Applicant(s)
Drasler et al.

Examiner
Michael Thaler

Art Unit
3731



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-63 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 35-63 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 6) ☐ Other:

Art Unit: 3731

4
The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 36 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There is no antecedent basis for "said flexible strands having circumferential componency" in lines 2-3.

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 62 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In line 4, "being attached to the blood vessel" defines the blood vessel (which is non-statutory subject matter) as being part of the claimed combination. This may be corrected by inserting "adapted to be" after "being".

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at

Art Unit: 3731

the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 35-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Polansky (3,304,557). Polansky show flexible strands 13 having axial compoency interwoven with flexible strands 14 having circumferential compoency and structural strands 15 or 16 interwoven along with the flexible strands. The Polansky specification fails to specifically indicate that the structure will not significantly leak blood serum or blood cellular elements. However, Polansky does teach that the structure may be used as an artificial artery or vein (col. 1, line 58). It would have been obvious that a structure which performs this function would not significantly leak blood serum or blood cellular elements since a significant leak would destroy the intended function of conveying the blood. As to claim 38, Polansky fails to disclose a bifurcated member. However, it is well known in this art to make arterial grafts bifurcated in order to conduct blood to two arterial branches. Making the Polansky tubular member bifurcated so that it also could perform this function would have been obvious. As to claims 44 and 45, Polansky fails to disclose the reinforcing structural strands 15 or 16 as being metal. However, it, is well known in this art to use metal as a reinforcing material for grafts since it is very strong. Using metal as the material for reinforcing structural strands 15 or 16 of Polansky would have been

Art Unit: 3731

obvious for this reason. As to claim 57, the Polansky structural strands 15 or 16 which form the helix portion of the alternating rings and helix described in col. 5, lines 66-69 extend in an axial (as well as circumferential) direction. As to claims 61 and 62, Polansky fails to disclose the structural strands extending beyond an end of the tubular member to be attached to an attachment means. However, it is well known in this art to so construct attachment means on vascular grafts in order to provide a strong attachment between the graft and blood vessel. It would have been obvious to so construct the Polansky vascular graft so that it too would have this advantage. As to claim 63, the Polansky structural strands are distributed "generally throughout" the composite structure, as claimed, since the reinforcing rings in which they are located are only 5/32 inch apart (col. 6, line 75 to col. 7, line 1). The Polansky specification fails to specifically indicate that focused stress between the flexible and structural strands are reduced. However, it would have been obvious that such focused stress is reduced in view of the close spacing of the reinforcing rings.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Thaler whose telephone number is (703) 308-2981. The examiner can normally be reached Monday to Friday.

Art Unit: 3731

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Milano can be reached on (703)308-2496. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-3590 for regular communications and (703)305-3590 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0858.

mht
April 14, 2003



MICHAEL THALER
PRIMARY EXAMINER
ART UNIT 3731